

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8. (Canceled)

9. (Currently amended) A method, in a data processing system, for deleting entries from a directory in which directory information is stored in a set of database tables, comprising the steps of:

receiving a request at the data processing system to delete a directory entry;

responsive to receiving the request to delete a directory entry, determining to tag the directory entry for subsequent deletion by setting an attribute of the directory entry to a predetermined value;

updating a first database table storing the attribute of the directory entry;

responsive to a search by the data processing system for directory entries that satisfy a search query, excluding tagged directory entries from search results that otherwise satisfy the search query;

periodically searching for tagged during entries during a cleanup process interval; and

deleting by the data processing system references to the tagged directory entries throughout the set of database tables.

10. (Original) The method as described in claim 9 wherein the directory entry is tagged by setting its creation time to a given value.

11. (Original) The method as described in claim 10 wherein the given value is a null value.

12. (Previously presented) The method as described in claim 9 wherein the first database table is an entry table.

13. (Original) The method as described in claim 12 wherein the set of database tables includes at least one attribute table storing information about an attribute.

14. (Currently amended) A method, in a data processing system, for searching a database from a directory service, comprising the steps of:

receiving a search query at the data processing system;

responsive to a search by the data processing system for directory entries that satisfy the search query, excluding given directory entries from search results that otherwise satisfy the search query, wherein a given directory entry is a directory entry that has been tagged for deletion by setting an attribute of the given directory entry to a predetermined value; and

returning by the data processing system the search results.

15. (Original) The method as described in claim 14 wherein the directory service is a Lightweight Directory Access Protocol (LDAP) directory service and the database is managed by a relational management service.

16. (Currently amended) A computer program product in a computer-readable medium for deleting entries from a directory in which directory information is stored in a set of database tables, comprising:

means for receiving a request to delete a directory entry;

means for determine, responsive to receiving the request to delete a directory entry, to tag the directory entry for subsequent deletion by setting an attribute of the directory entry to a predetermined value;

means for updating a first database table storing the attribute of the directory entry;

means responsive to a search for directory entries that satisfy a search query for excluding tagged entries from search results that otherwise satisfy the search query;

means for periodically searching for tagged directory entries in the first database table during a cleanup process interval; and

means for deleting references to the tagged directory entries throughout the set of database tables.

17. (Canceled)

18. (Currently amended) The computer program product as described in claim [[17]] 16 wherein the search query is a Lightweight Directory Access Protocol (LDAP) directory service query.

19. (Previously presented) A directory service, comprising:

a directory organized as a naming hierarchy having a plurality of entries each represented by a unique identifier;

a relational database management system having a backing store for storing directory data in a set of database entries; and

means for deleting entries from the directory, comprising:

means for determining, responsive to receiving the request to delete a directory entry, to tag the directory entry for subsequent deletion by setting an attribute of the directory entry to a predetermined value;

means for updating a first database table storing the attribute of the directory entry;

means for periodically searching for tagged directory entries in the first database table during a cleanup process interval; and
means for deleting references to the tagged directory entries throughout the set of database tables;
and

means responsive to a search for directory entries that satisfy a search query for excluding tagged directory entries from search results that otherwise satisfy the search query.

20. (Original) The directory service as described in claim 19 wherein the directory is compliant with the Lightweight Directory Access Protocol (LDAP).

21. (New) The method as described in claim 9 wherein the step of excluding tagged directory entries includes modifying an SQL query to exclude rows having a null change creation.

22. (New) The method as described in claim 9 wherein the directory is a Lightweight Directory Access Protocol (LDAP) directory service and the database tables are managed by a relational database management service.